#### AUDIO TIMER

# AT-52(B)

# KENWOOD

#### INSTRUCTION MANUAL

This instruction manual can also be used for model AT-52B. The operations and specifications for both model AT-52B and model AT-52 are the same.

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#### Introduction

Thank you for selecting our audio timer. It is audio timer which embodies Kenwood's rich experience and outstanding technology. This manual should be read carefully to

understand how to connect and operate your new audio timer correctly.

#### For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your Kenwood dealer for information or service on this product.

Model AT-52/52B Serial number

#### Unpacking

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

#### WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### Important!

#### U.S.A. and Canada

Units shipped to the U.S.A. and Canada are designed for operation with 120 volts AC 60 Hz only. These units are not equipped with an AC voltage selector switch and frequency selector switch, and the description of such switches that follows should be disregarded.

#### All other countries

Units shipped to countries other than the U.S.A. and Canada are equipped. with an AC voltage selector switch and frequency selector switch on the rear panel.

Refer to the following paragraph for the proper settings of these switches

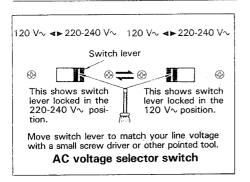
# Before applying power

#### AC voltage selector

This timer operates on 120 volts or 220 ~ 240 volts AC. The AC voltage selector switch on the back panel is set to the AC line voltage generally available in the country where it is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your AC line voltage. If not, it must be properly changed to the proper setting.

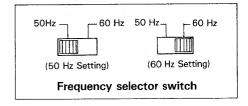
Note: -

Our warranty does not cover damage caused by excessive AC line voltage due to improper setting of the AC voltage selector switch.



#### Adjusting to your line frequency

The frequency selector switch is provided at the rear panel. Be sure to set the selector switch to your country frequency (50 Hz or 60 Hz) before connecting the power cord.



## **Features**

#### Easy-to-read display

The 24-hour fluorescent display shows the time in green. The numerals have a height of 13 mm, so they are easy to read.

#### AC outlet indicator

Indicates the status of AC outlet conditions in red.

#### MOS type LSI

The MOS type LSI allows the AT-52/52B to display the time accurately, and is synchronized by the AC line frequency.

#### Accurate timer set

The timer can be set at 1 minute intervals; the timer functions with an accuracy of +0.02 second.

## **Before** use

#### Installation

- Do not use the unit in locations with high temperature (40°C or more) and humidity and do not expose it to direct sunlight. High temperatures adversely affect the performance of the unit.
- Keep the unit away from water to prevent any possibility of damage.
- Install the unit on a flat surface, free from dust and vibration

#### Safety precautions

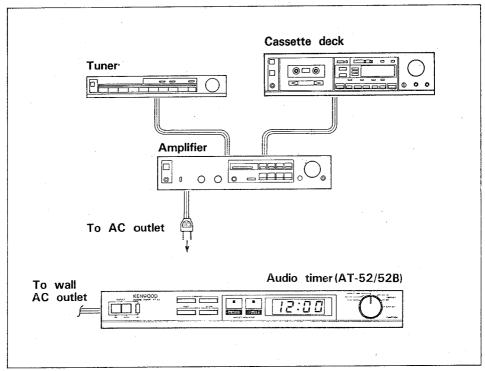
- The unit is factory adjusted for optimum operation and no further adjustments are required. Do not open the case.
- When connecting or disconnecting the power cord, always hold the body of the plug, not the cord, making sure that your hand is dry. If your hand is wet, it could result in an electrical shock.
- Keep the unit away from any chemicals, as they could affect the finish of the case.
- When the unit is not to be used for a long period of time, be sure to disconnect the power cord.

#### Notes on operation

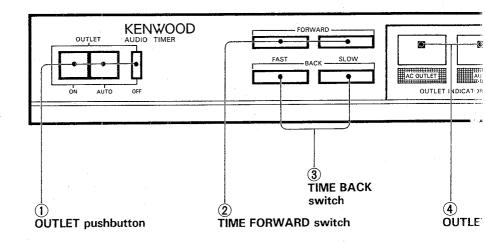
- This unit should not be connected to a cassette deck that does not feature a stand-by mechanism. Connecting this unit to such a tape deck will damage the tape deck.
- ·When the power plug is connected or power is stored after an outage, the display will flickers. In this case, the display shows wrong time. Correct the time referring to the "Time setting" on page 8.
- When the "AUTO" OUTLET pushbutton is pressed, the time sometimes cannot be set. In this case, the sleep timer may sometimes work. To set the timer, refer to "In case of difficulty".

# **System connections**

Connection example (auto or timer recording of an FM broadcast)



### Controls and



#### (1) OUTLET pushbuttons

ON.......... Used to supply power to all AC outlets. When this button is pressed, the "AC OUTLET" of the OUTLET INDICATOR lights úp.

AUTO......Used when a timer or sleep timer is used. Power is available from the AC outlets at the preset time.

OFF......Used to shut off all AC outlets. When this button is pressed, the "AC OUTLET" of the OUTLET INDICATOR goes off.

#### (2) TIME FORWARD switch

Use this switch to advance the time when the fucntion selector is set to "ADJUST", "TIMER SET" or "SLEEP SET".

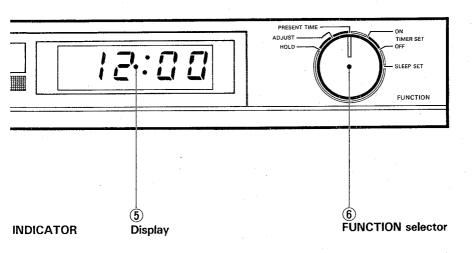
FAST ......Advances the time quickly. SLOW ......Advances the time at a rate of about 2 minutes per second.

#### ③ TIME BACK switch

Use this switch to count back the time when the fucntion selector is set to "AD-JUST" or "TIMER SET".

FAST ......Counts back the time quickly. **SLOW** Counts back the time at a rate of about 2 minutes per second.

## indicators



#### **4) OUTLET INDICATOR**

When the "AC OUTLET" indicator lights up, power is available from the AC outlets. When it does not light, power is not available. When the "AUTO" OUTLET, pushbutton is pressed, the "AUTO" indicator lights up.

#### ⑤ Display

Indicates the time selected by the position of the FUNCTION selector.

#### **6** FUNCTION selector

**HOLD** ......Stops the time count and resets the seconds display to 0:00.

**ADJUST** ...Set to this position to adjust hours and minutes.

#### PRESENT

**TIME** ......Set to this position to obtain the current time. In normal use, set the switch to this position.

#### TIMER SET:

ON ......Set to this position to automatically turn the connected audio components ON.

OFF ......Set to this position to automatically turn the connected audio components OFF.

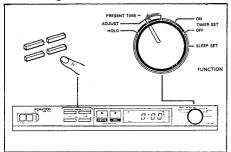
#### SLEEP

**SET** ... Set to this positon to adjust the sleep timer operation time.

# Time setting

Set the time following the procedure below and refer to "Controls and indicators".

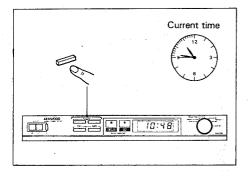
- 1. Connect the power plug to wall socket. At this time, the display will flash.
- 2. Set the FUNCTION selector to "AD-JUST" and operate the TIME FOR-WARD or BACK switch to stop the flashing.



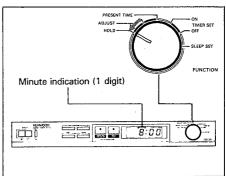
- 3. Press the ON or OFF button.
- 4. Depress the TIME FORWARD or BACK switch so the display 1 or 2 minutes ahead of the current time.

#### Example

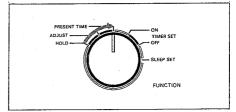
When the current time is AM 10:46.45, set the display to 10:48.00



5. Set the FUNCTION selector to "HOLD". At this time, the display stops advancing.



6. Wait until the displayed time corresponds to the current time. At exactly the moment when the displayed time corresponds to the current time, set the FUNCTION selector to "PRESENT TIME". This sets the current time correctly.

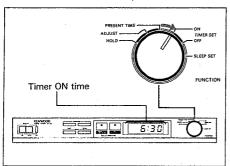


# **Timer setting**

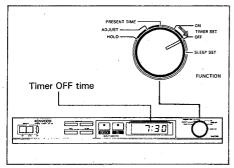
Set the timer to turn the connected components ON/OFF at the desired times.

Turn the power switches of the connected audio components ON.

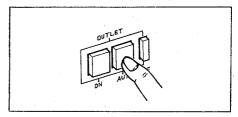
1. Set the FUNCTION selector to the "TIMER SET (ON)" position.



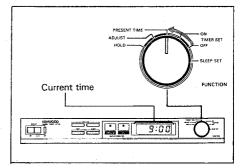
- 2. Set the ON time using the TIME FOR-WARD or BACK switch.
- 3. Set the FUNCTION selector to "TIMER SET (OFF)".



- 4. Set the OFF time using the TIME FOR-WARD or BACK switch.
- 5. Press the "AUTO" OUTLET pushbuttons. When the "AUTO" pushbutton is pressed, the timer can be operated at 24-hour intervals in preset mode.



6. Set the FUNCTION selector to the "PRESENT TIME", and the display indicates the present time.

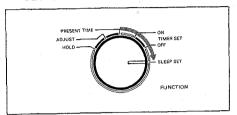


The timer can function only in the ON-OFF sequence.

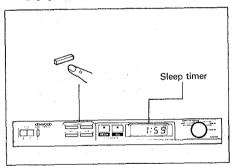
# Sleep timer setting

The sleep timer automatically turns the connected audio components OFF after the preset ON time has been passed. The ON time can be preset from 1 minute to 1 hour 59 minutes ahead at 1 minute intervals.

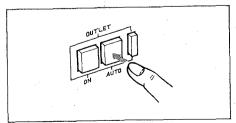
1. Set the FUNCTION selector to "SLEEP SET".



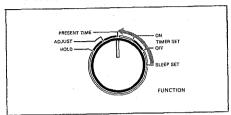
2. Set the desired ON time using the TIME FORWARD switch. The displayed time (1:59, 1:58.....1:00, 59. 58....) is the ON time.



3. Press the "AUTO" OUTLET pushbutton. Power is supplied to the AC outlets and the "AC OUTLET" and the "AUTO" outlet indicator light.



4. Return the FUNCTION selector to "PRESENT TIME". The display indicates the current time.



5. When the display reaches 0:00, the timer automatically turns OFF the connected audio components.

#### Notes:-

- To stop the sleep timer mode midway, change the ON time to 0:00.
- When recording in the sleep timer mode, be careful that the tape being used is not shorter than the preset ON time.

# In case of difficulty

Before consulting your Kenwood dealer, check the timer referring to the table below.

Symptom	Possible cause	Remedy
The current time is fast or slow.	The power frequency selector is not set correctly.	Set the power frequency selector to the correct position (refer to the procedure on Page 3.)
The displayed time does not advance.	The FUNCTION selector is set to "TIMER SET (ON or OFF)".	Set the FUNCTION selector to "PRESENT TIME".
The display flashes and indicates the wrong current time or preset time.	The power has been restored after an outage.	Correct the current time and preset time (refer to the procedures on pages 8 and 9).
Preset time cannot be set.	The timer is in the sleep timer mode.	Set the FUNCTION selector to "SLEEP SET" and set the sleep timer ON time 0:00.
The sleep timer does not stop at the preset time.	The timer ON time is set at the sleep timer ON time.	Reset the timer set time later than the sleep timer ON time.

# **Specifications**

Clock type ......24-hour digital clock Display type ......Fluorescent display Time accuracy ......AC power supply synchronized Timer: ON time ......Can be set at 1 minute intervals Timer accuracy .....Less than +0.02 second after preset time Sleep timer ...... The ON time can be set from between 1 minute and to 1 hour 59 minutes 1000 W (Other countries) Power requirements ......U.S.A. and Canada Models: AC 120 V, 60 Hz Other Countries: AC 120/220 ~ 240 V (Switchable), 50/60 Hz (Switchable) Power consumption ......6 W H 57 mm (2-1/4") 230 mm (9-1/16") Weight ......2.0 kg (4.4 lbs)

(Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.)

